***COMPLETE IN NOTEBOOK! COPY ALL FIGURES!***

CW47HW47: Arc Length & Sector Area Pt II

**Geometry  
Due: Wednesday, November 8th   
Due**

**READ ALL DIRECTIONS! Failure to show** ALL WORK **and follow** all directions COMPLETELY **will result in LaSalle.**

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| 1. ../../../../Desktop/Screen%20Shot%202016-03-21%20at%206.39.17%20PM.pna) Find the circumference of the circle.   b) Set up the proportion you would use to find the arc length shown. | 1. a) Find the area of the circle.   b) Set up the proportion you would use to find the sector area.   ../../../../Desktop/Screen%20Shot%202016-03-21%20at%206.39.17%20PM.pn |

Directions: Find the arc length and sector area for each sector shown below.

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| --- | --- |
| 1. Find the arc length.   ../../../../Desktop/Screen%20Shot%202016-03-21%20at%206.38.48%20PM.pn | 1. ../../../../Desktop/Screen%20Shot%202016-03-21%20at%206.38.48%20PM.pnFind the area of the sector. |
| 1. ../../../../Desktop/Screen%20Shot%202016-03-21%20at%206.38.53%20PM.pn Find the arc length. | 1. Find the area of the sector. ../../../../Desktop/Screen%20Shot%202016-03-21%20at%206.38.53%20PM.pn |
| 1. Find the arc length.   ../../../../Desktop/Screen%20Shot%202016-03-21%20at%206.38.57%20PM.pn | 1. ../../../../Desktop/Screen%20Shot%202016-03-21%20at%206.38.57%20PM.pn Find the area of the sector. |

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| 1. INSCRIBED SQUARE A square with side length 6 units is inscribed in a circle. Draw a sketch to represent the problem. Find the circumference of the circle. | 1. PIZZA! PIZZA! You stop for lunch at a local pizza shop where pizza is cut into 8 slices. Would your hunger be satisfied with one slice from a 16-in pizza or two slices from a 12-inch pizza (disregarding thickness)? Explain your answer using mathematical evidence. |
| 1. A Cathedral window is built in the shape of a semicircle. If the window is to contain three stained glass sections of equal size, what is the area of each stained glass section?   **../../../../../Desktop/Screen%20Shot%202016-03-13%20at%202.41.39%20PM** | 1. TREES A group of students want to find the diameter of a trunk of a young sequoia tree. The students wrap a rope around the tree trunk, then measure the length of rope needed to wrap one time around the trunk. This length is 21 feet. *Explain* how they can use this length to estimate the diameter of the tree trunk. |
| 1. SHORT RESPONSE It takes about ¼ cup of dough to make a tortilla with a 6-inch diameter. How much dough does it take to make a tortilla with a 12-inch diameter? *Explain* your reasoning. | 1. WRITING Suppose you double the angle measure given for the sector of a circle. Will the area of the sector also be doubled? *Explain* in at least 1 sentence. |